

8. An article comprising diamond doped with non-diamond material deposited

*B* on a ceramic framework material substrate.

*Bk* 14. The article of claim 13 wherein said filler material substantially completely

fills voids in said framework material substrate.

17. An article comprising diamond deposited on a ceramic open-cell foam

*B* substrate, said open-cell foam substrate having voids therein, said voids at least partially

filled with a filler material.

18. The article of claim 17 wherein said open-cell foam substrate comprises a

*B* material compatible with a diamond deposition process.

19. The article of claim 17 wherein said open-cell foam substrate comprises a

material incompatible with a diamond deposition process coated with a material

compatible with a diamond deposition process.

22. The article of claim 17 wherein said filler material substantially completely

*Be* fills said voids.

23. An article comprising diamond doped with non-diamond material deposited on a ceramic open-cell foam substrate, said open-cell foam substrate having voids therein.

24. The article of claim 23 wherein said open-cell foam substrate comprises a material compatible with a diamond deposition process.

25. The article of claim 23 wherein said open-cell foam substrate comprises a material incompatible with a diamond deposition process coated with a material compatible with a diamond deposition process.

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28. The article of claim 23 wherein said voids are at least partially filled with a filler material.

29. The article of claim 28 wherein said filler material substantially completely fills said voids.

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32. An article comprising diamond deposited on a ceramic framework material substrate, said diamond at least partially coated with a catalytic material.

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